### PATENT COOPERATION TREATY

# **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

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(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 703487PCT	FOR FURTHER ACTION	See Form PCT/IPEA/416	
International application No. PCT/CA2005/000289	International filing date (day/month/year) 28 February 2005 (28-02-2005)	Priority date (day/month/year) 04 March 2004 (04-03-2004)	
International Patent Classification (IPC) or national classification and IPC IPC(7): E05F 11/48, E05F 15/16			
Applicant INTIER AUTOMOTIVE CLOSURES INC. ET AL			
This report is the international preliming under Article 35 and transmitted to the content of the content	nary examination report, established by this Intapplicant according to Article 36.	ernational Preliminary Examining Authority	
2. This REPORT consists of a total of	4 sheets, including this cover sheet.		
3. This report is also accompanied by AN	NEXES, comprising:		
	to the International Bureau) a total of 3	sheets, as follows:	
[X] sheets of the des	cription, claims and/or drawings which have be	en amended and are the basis of this report	
	ersede earlier sheets, but which this Authority disclosure in the international application as fiental Box.		
b. [ ] (sent to the International	Bureau only) a total of (indicate type and num	per of electronic carrier(s))	
	,containing a sequence listing and/or		
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4. This report contains indications relating	g to the following items:		
[X] Box No. I Basis of the repo	rt		
[ ] Box No. II Priority			
	nt of opinion with regard to novelty, inventive	step and industrial applicability	
[ ] Box No. IV Lack of unity of			
	ent under Article 35(2) with regard to novelty,	inventive step or industrial applicability;	
[ ] Box No. VI Certain document	lanations supporting such statement		
	n the international application		
	ions on the international application		
Date of submission of the demand 28 June 2005 (28-06-2	Date of completion of 18 November 2005 (1	ms report 3-11-2005)	
Name and mailing address of the IPEA/C. Canadian Intellectual Property Office	•		
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## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/CA2005/000289

Box	No.	I Ba	sis of the	report		
1.	Witl	h regar	d to the la	nguage, this report is based	on:	
	[X] the international application in the language in which it was filed					
	[ ]	a tran	slation of	the international application	into	, which is the language of a
		transl	lation furni	ished for the purposes of:		
		[ ]	internatio	nal search (Rules 12.3(a) and	d 23.1(b))	
		[ ]	publication	on of the international applica	ation (Rule 12.4(a))	
		[ ]	internatio	nal preliminary examination	(Rules 55.2(a) and/or 55.3(a))	
2.	to th	ie rece exed to the in	iving Offic this repor	e in response to an invitation	n under Article 14 are referred t	n (replacement sheets which have been furnished o in this report as "originally filed" and are not
	[A]		pages	1-6		as originally filed/furnished
		[ ]	pages*	<u>1-0</u>	received by this Authority or	-
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	[*r]	Γ 1	pages		1	as originally filed/furnished
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		[X]	pages*	7, 8, 8a (Claims 1-12)	received by this Authority or	- · · · · · · · · · · · · · · · · · · ·
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	[ ]			ng and/or any related table(s	) - see Supplemental Box Relati	ng to Sequence Listing.
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3.	[ ]	The a	amendmen	ts have resulted in the cancel	lation of:	
		[ ]	the descri	iption, pages	•	
		[ ]	the claim		·	
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		[ ]		nce listing (specify):		
		[ ]	any table	(s) related to sequence listing	g (specify):	
4.	[ ]		they have the descri the claim the drawi the seque	been considered to go beyon iption, pages	d the disclosure as filed, as indi	this report and listed below had not been made, cated in the Supplemental Box (Rule 70.2(c)).
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*	If iter	m 4 ap	plies, some	e or all of those sheets may b	e marked "superseded."	

#### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/CA2005/000289

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial
applicability; citations and explanations supporting such statement

1. Statement					
Novelty (N)	Claims	<u>1-12</u>	YES		
	Claims	NONE	NO		
		,			
Inventive step (IS)	Claims	<u>1-12</u>	YES		
	Claims	<u>NONE</u>	NO		
	,				
Industrial applicability (IA)	Claims	<u>1-12</u>	YES		
	Claims	NONE	NO		

#### 2. Citations and explanations (Rule 70.7)

Reference is made to the following documents: D1: US6256929 (Serrano et al.) 10 July 2001

D1 discloses a window regulator having a rail member, a cable, and a motor. The motor drives the cable along the rail to move a window pane engaged on the cable. The rail has a mounting on which a motor casing which houses the motor can be adjusted to a selected position and then securely fixed to the mounting. The motor that operates the cable is also fixed to the casing. The selectability of the mounting position allows the drive motor to be moved for tensioning of the rail cable.

Novelty (N)

Claims 1-12 appear to comply with PCT Article 33(2) because the prior art does not teach a window regulator characterized by a rail having a guide located at one end and a drive means located at the opposite end whereby the drive means are pivotally mounted to the rail to allow the drive means to be moved away from the opposite guide to tension a drive cable.

Inventive Step (IS)

Claims 1-12 appear to meet the criteria set out in **PCT Article 33(3)**. The claims are considered to involved an inventive step, having regard to the closest prior art D1at the relevant date. D1 teaches of a centrally-located motor housing which is pivotally mounted to a window regulator rail assembly to allow tensioning of the drive cable. It would not have been obvious for a person skilled in the art to relocate the pivotal-mounted drive means of D1 to one end of the rail as per current invention.

Industrial Applicability (IA)

The subject matter of claims 1-12 is considered to be industrial applicable and thus fulfills the requirement of PCT Article 33(4).

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/CA2005/000289

Box No. VII	Certain defects in the international application			
The following defects in the form or contents of the international application have been noted:				
1. The abstract does not comply with PCT Rule 8.1(d). Each technical feature mentioned in the abstract and illustrated by a drawing the international application should be followed by a reference sign, placed between parenthesis.				
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#### We claim:

1. A window regulator comprising:

at least one lift plate to which a window can be affixed; at least one rail along which said at least one lift plate can be moved, the rail including a guide located adjacent one end and a drive means located adjacent the opposite end, the drive means including a driven drum driven by said drive means;

and a flexible drive member extending about said driven drum and said guide and connected to said lift plate such that movement of said driven drum moves said lift plate along the at least one rail via said flexible drive member and wherein said drive means and said driven drum are pivotally mounted to said rail to allow said driven drum to be moved away from said guide to tension said flexible drive member.

- 2. The window regulator of claim 1 wherein said flexible drive member is a belt.
- 3. The window regulator of claim 1 wherein said flexibly drive means is a wire cable.
- 4. The window regulator of claim 1 wherein said guide is a pulley.
- 5. The window regulator of claim 1 including first and second rails, each rail having a lift plate to which a respective one of opposed sides of a window can be attached, the first rail including said guide adjacent one end and said drive means and driven drum adjacent said opposite end and the second rail including a guide adjacent each respective end and wherein the flexible drive member extends about a first portion of the driven pulley and the guide of the first rail and a second flexible drive member extends around a second portion of the driven drum and each guide of the second rail such that movement of said driven drum moves each lift plate in the same direction along each respective rail.
- 6. The window regulator of claim 5 wherein at least one of said guides is a pulley.

- 7. The window regulator of claim 5 wherein the flexible drive member passes through first and second conduits extending between said first and second rails.
- 8. The window regulator of claim 5 wherein said driven drum also includes a guide portion.
- 9. The window regulator of claim 1 including complementary toothed surfaces on said rail and said drive means, said complementary toothed surfaces inter-engaging to maintain said drive means in a desired position wherein said flexible drive member is tensioned to a selected degree.
- 10. In a window regulator having a drive means including a driven drum engaging a flexible drive member that is connected to a lift plate, wherein the flexible drive member is routed about a guide mounted to one end of a rail, an improvement comprising pivotally mounting the drive means to an opposite end of the rail.
- 11. A window regulator comprising:
  - at least one rail;
  - a flexible drive member;
  - at least one lift plate connected to the flexible drive member;
- at least one guide mounted to the at least one rail for routing the flexible drive member; and

drive means including a driven drum engaging the flexible drive member, wherein the drive means is pivotally mounted to the at least one rail to allow the driven drum to be moved in relation to the at least one guide in order to tension the flexible drive member.

- 12. A window regulator comprising:
  - at least one lift plate to which a window can be affixed;
- at least one rail along which said at least one lift plate can be moved, the rail including a guide located adjacent one end and a drive means located adjacent the opposite end, the drive means including a driven drum driven by said drive means;

and a flexible drive member in the form of an endless loop of preselected

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length, the drive member extending about said driven drum and said guide and connected to said lift plate such that movement of said driven drum moves said lift plate along the at least one rail via said flexible drive member and wherein said drive means and said driven drum are pivotally mounted to said rail to allow said driven drum to be moved away from said guide to tension said flexible drive member.